CUSTOMER CONNECTIONS

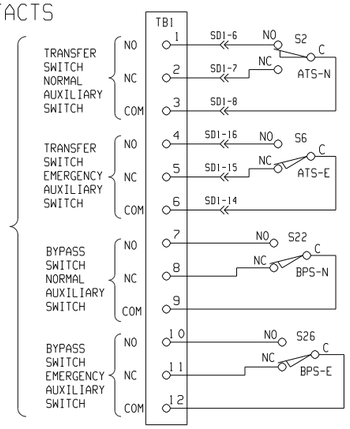
AUXILIARY CONTACTS

STANDARD CONNECTIONS

AVAILABLE ON ALL UNITS.

FOR CUSTOMER USE

TRANSFER SWITCH AND BYPASS SWITCH AUXILIARY CONTACTS RATED: 10 AMPS, 250 VAC



UTILITY TO GENERATOR

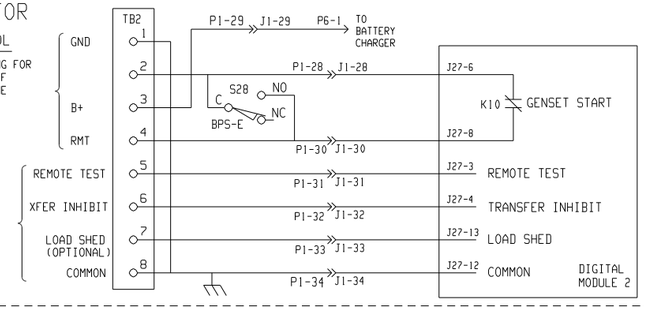
TO ENGINE GENERATOR CONTROL

REFER TO THE INTERCONNECTION DRAWING FOR PROPER INSTALLATION OF WIRING AND IF NEEDED, JUMPER LOCATION, BETWEEN THE GENSET CONTROL AND TRANSFER SWITCH.

ON PARALLELING SYSTEMS. REFER TO SYSTEM INTERCONNECTION DRAWING FOR CORRECT WIRING.

FOR CUSTOMER USE

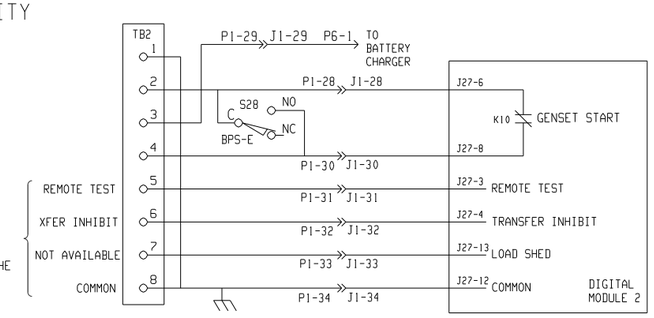
TO USE REMOTE TEST, TRANSFER INHIBIT AND LOAD SHED CONNECT AN OPEN CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). CLOSE THE CONTACT TO ACTIVATE THE FUNCTION. NOTE THAT LOAD SHED IS OPTIONAL AND MUST BE INSTALLED IN ORDER TO USE.



UTILITY TO UTILITY

FOR CUSTOMER USE

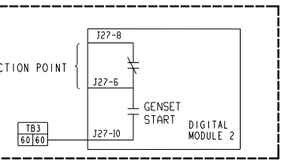
TO USE REMOTE TEST AND TRANSFER INHIBIT CONNECT AN OPEN CONTACT BETWEEN THE APPLICABLE TERMINAL AND COMMON (TB2-8). CLOSE THE CONTACT TO ACTIVATE THE FUNCTION.



ALTERNATE ENGINE GENERATOR CONTROL

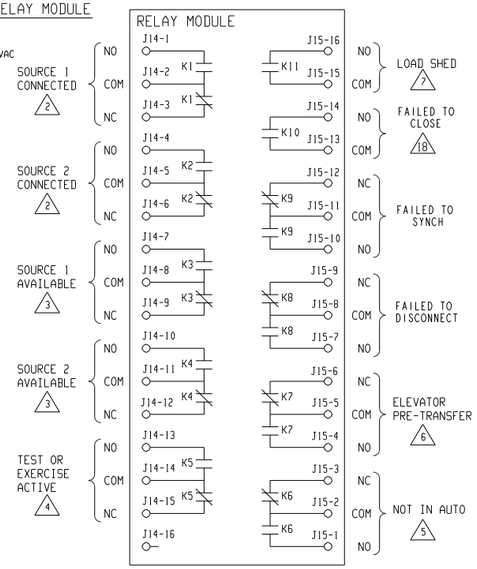
REFER TO THE INTERCONNECTION DRAWING FOR PROPER INSTALLATION OF WIRING AND, IF NEEDED, JUMPER LOCATION, BETWEEN THE GENSET CONTROL AND TRANSFER SWITCH.

NOTE THAT J27-6 IS COMMON BETWEEN GENSET START NORMALLY OPEN AND STANDARD NORMALLY CLOSED CONTACTS



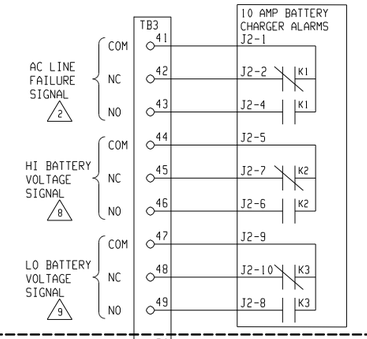
OPTIONAL: RELAY MODULE

CONTACTS RATED:
2 AMPS AT 30 VDC
0.60 AMPS AT 120VAC



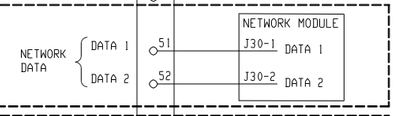
OPTIONAL: 10 AMP BATTERY CHARGER ALARMS

CONTACTS RATED:
4 AMPS AT 30 VDC OR
120VAC MAX



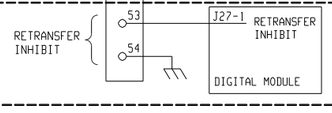
OPTIONAL: NETWORK MODULE

USE TWISTED PAIR



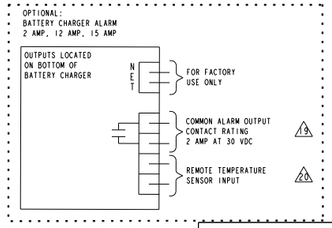
OPTIONAL: RETRANSFER INHIBIT

CONNECT A JUMPER OR A CLOSED CONTACT BETWEEN TB3-53 AND TB3-54 TO INHIBIT RETRANSFER.



NOTES:

1. TB1 AND TB2 ARE MOUNTED ON THE TOP OF THE BYPASS SWITCH. TB3 IS MOUNTED ON THE LEFT SIDE OF THE CABINET.
2. SHOWN WITH SOURCE NOT CONNECTED.
3. SHOWN WITH SOURCE NOT AVAILABLE.
4. SHOWN NOT ACTIVE. CONTACTS CHANGE STATE DURING TEST OR EXERCISE PERIOD.
5. SHOWN WITH CONTROL IN AUTOMATIC MODE. CONTACTS CHANGE STATE WHEN CONTROL IS NOT IN AUTO.
6. SHOWN NOT ACTIVE. CONTACTS CHANGE STATE FOR AN ADJUSTABLE TIME BEFORE LOAD TRANSFER OCCURS.
7. SHOWN NOT ACTIVE. CONTACTS CHANGE STATE DURING LOAD SHED.
8. SHOWN UNDER NORMAL BATTERY VOLTAGE CONDITION. CONTACTS TRANSFER UNDER A HIGH BATTERY VOLTAGE CONDITION.
9. SHOWN UNDER A LOW BATTERY VOLTAGE CONDITION.
10. SEE SHEET 2.
11. SEE SHEET 2.
12. SEE SHEET 2.
13. SEE SHEET 4.
14. SEE SHEET 4.
15. SEE SHEET 5.
16. SEE SHEET 5.
17. SEE SHEET 5.
18. SHOWN NOT ACTIVE. CONTACTS CHANGE STATE DURING A FAILED TO TRANSFER OR FAILED TO RETRANSFER EVENT.
19. THE FOLLOWING WILL CAUSE A BATTERY CHARGER ALARM OUTPUT.
    LOW BATTERY VOLTAGE
    HIGH BATTERY VOLTAGE
    LOW AC INPUT VOLTAGE
    HIGH AC INPUT VOLTAGE
    OVERCURRENT
    HIGH CHARGER TEMPERATURE
    BATTERY FAILURE
    HIGH BATTERY TEMPERATURE:
    NOT AVAILABLE ON 2 AMP CHARGER
20. USE THE INVERTER REMOTE TEMPERATURE PROBE. (PART NO. 0193-0530)



UTILITY TO GENSET CONTROL
UTILITY TO UTILITY CONTROL
BYPASS TRANSFER SWITCH
DISPLAY MODULE
3 AND 4 POLE
150-1000 AMP
240 VOLT 1 PHASE
190 VOLT 3 PHASE
208 VOLT 3 PHASE
220 VOLT 3 PHASE
240 VOLT 3 PHASE
380 VOLT 3 PHASE
415 VOLT 3 PHASE
440 VOLT 3 PHASE
480 VOLT 3 PHASE

OPTIONS:
NETWORK MODULE
LOAD SHED
RELAY MODULE
BAR GRAPH
LOAD CURRENT MODULE
BATTERY CHARGER
BATTERY CHARGER ALARMS
RETRANSFER INHIBIT

MODEL/PLATFORM: BTPC 150-1000A SPEC A		THIS PART IS SIMILAR TO: .	
UNLESS OTHERWISE SPECIFIED THE FOLLOWING SHALL APPLY			ANG. TOL.: ± 1°
DIMENSIONAL TOLERANCES:	X ± 1	.X ± 1	.XX ± 1
HOLE SIZE 0.00-4.99 TOL. +0.15/-0.08	HOLE SIZE 5.00-9.99 TOL. +0.20/-0.10	HOLE SIZE 10.00-17.49 TOL. +0.25/-0.13	HOLE SIZE 17.50-24.99 TOL. +0.30/-0.13

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[ ] ARE IN: -
SIZE: D
SCALE:1
DIMENSIONING AND TOLERANCING PER: ASME Y14.5-2009
THIRD ANGLE PROJECTION
CAD SYSTEM
PTC® Creo® Parametric

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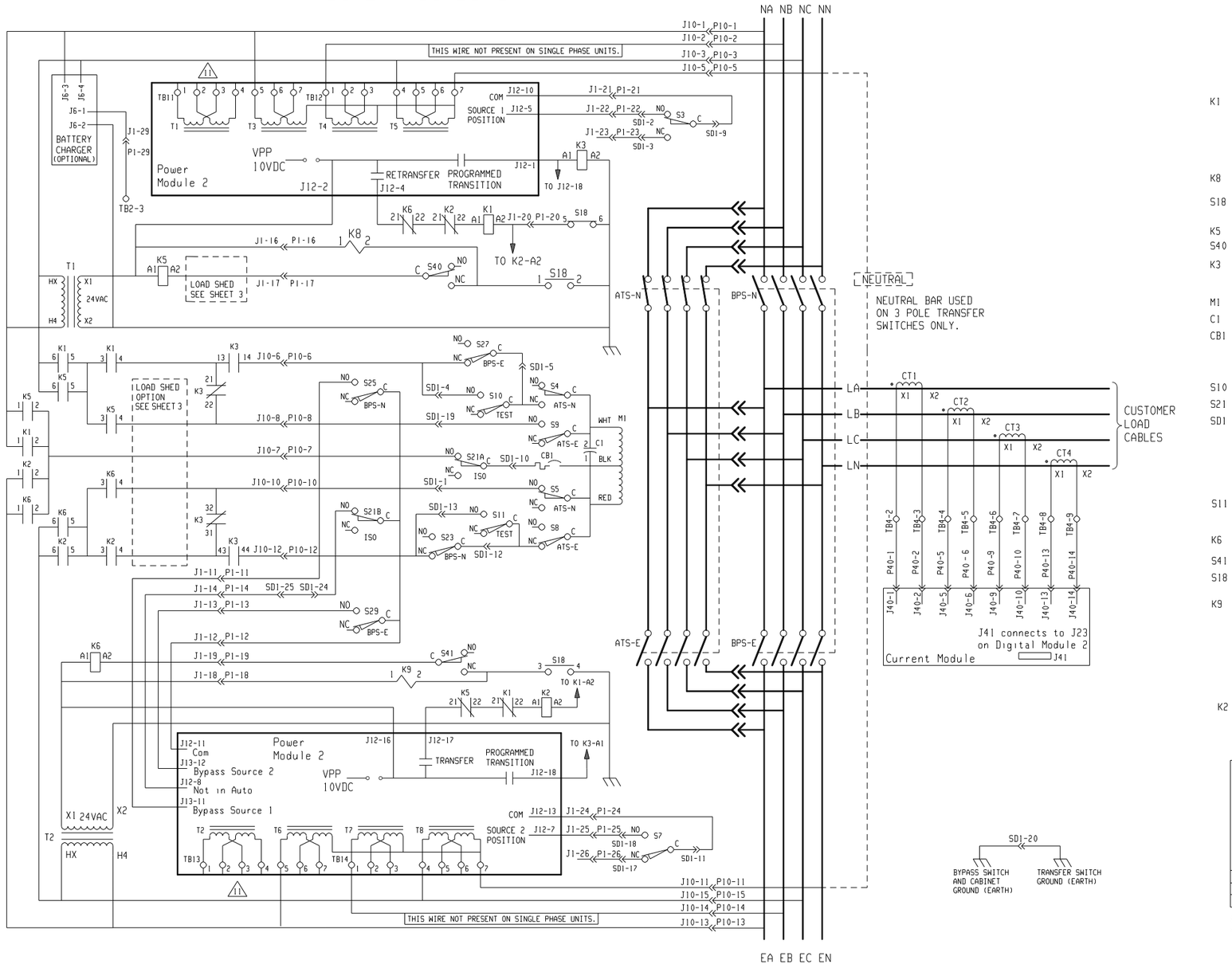
Part Number: **0626-2334** Part Revision: **F**

Part Name: **DIAGRAM,SCHEMATIC**

Drawing Category: **Detail** State: **Released**

SCHEMATIC DIAGRAM



K1 TRANSFER TO NORMAL RELAY

K8 BYPASS TO NORMAL SOLENOID
S18 BYPASS ENABLE SWITCH, BYPASS TO NORMAL
K5 BYPASS TO NORMAL RELAY
S40 BYPASS TO NORMAL SWITCH
K3 PROGRAMMED TRANSITION RELAY

M1 LINEAR MOTOR
C1 MOTOR RUN CAPACITOR
CB1 CIRCUIT BREAKER

S10 TEST POSITION SWITCH
S21 LINEAR MOTOR DISABLE
SD1 SECONDARY DISCONNECT

S11 TEST POSITION SWITCH

K6 BYPASS TO EMERGENCY RELAY
S41 BYPASS TO EMERGENCY SWITCH
S18 BYPASS ENABLE SWITCH, BYPASS TO EMERGENCY
K9 BYPASS TO EMERGENCY SOLENOID

K2 TRANSFER TO EMERGENCY RELAY

S18	* NORMAL	* EMERGENCY
1 - 2	X	
3 - 4		X
5 - 6	X	

X = CLOSED
* = MOMENTARY

NOTES:

10. ALL DEVICES ARE SHOWN DE-ENERGIZED WITH THE BYPASS SWITCH OPEN, THE TRANSFER SWITCH CLOSED TO NORMAL AND CRANKED INTO THE CONNECTED POSITION. 4 POLE TRANSFER SWITCH SHOWN. ON 3 POLE MODELS THE SWITCHED NEUTRAL POLE IS REPLACED WITH A SOLID NEUTRAL BAR.

⚠1 SEE SHEET 3 FOR TRANSFORMER PRIMARY JUMPERS.

12. FOR SINGLE PHASE UNITS: 120/240, 3 WIRE - CONNECT POWER CABLES TO A AND C.

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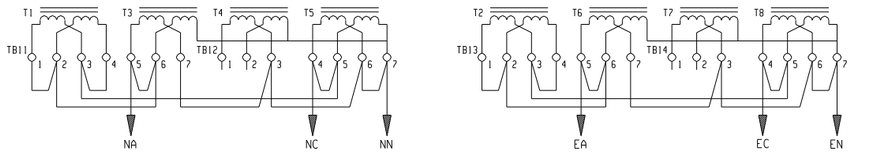
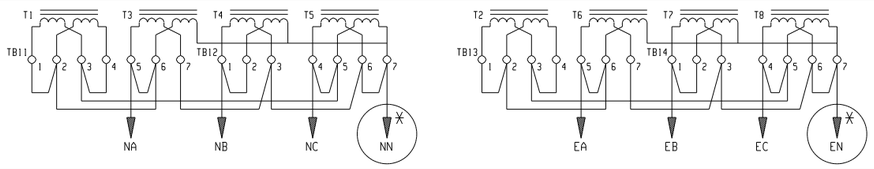
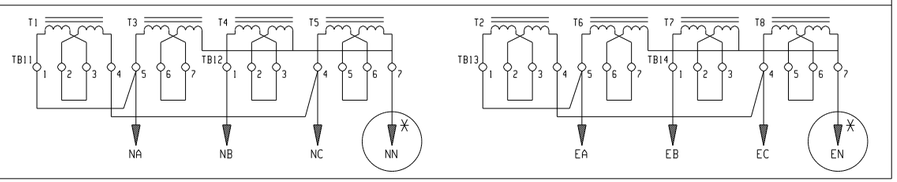
Part Name: **DIAGRAM,SCHEMATIC**

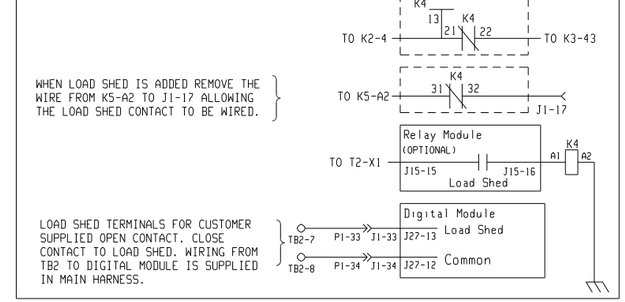
Drawing Category: **Detail** State: **Released**

LINE TO LINE VOLTAGE	POWER MODULE 2 TRANSFORMER CONNECTIONS
240 VAC 1 PHASE 3 WIRE	
190-240 VAC 3 PHASE 4 WIRE	
380-480 VAC 3 PHASE 4 WIRE	

SEE 0626-2335 FOR 600 VOLT CONNECTIONS.

*CONNECTIONS FOR SPECIAL WYE AND DELTA APPLICATIONS	
APPLICATION	POWER MODULE WIRING CHANGES
4-WIRE, 3-PHASE WYE WITH GROUNDED NEUTRAL	NO WIRING CHANGES NECESSARY THIS IS THE FACTORY CONFIGURATION
3-WIRE, 3-PHASE DELTA OR WYE WITH NO NEUTRAL OR UNGROUNDED NEUTRAL	1. DISCONNECT THE NEUTRAL SENSING WIRES FROM TB12-7 & TB14-7 ON THE POWER MODULE.
4-WIRE, 3-PHASE DELTA WITH GROUNDED NEUTRAL OR 3-WIRE, 3 PHASE DELTA WITH A GROUNDED CORNER.	1. DISCONNECT THE NEUTRAL SENSING WIRES FROM TB12-7 & TB14-7 ON THE POWER MODULE.

LOAD SHED (OPTIONAL)



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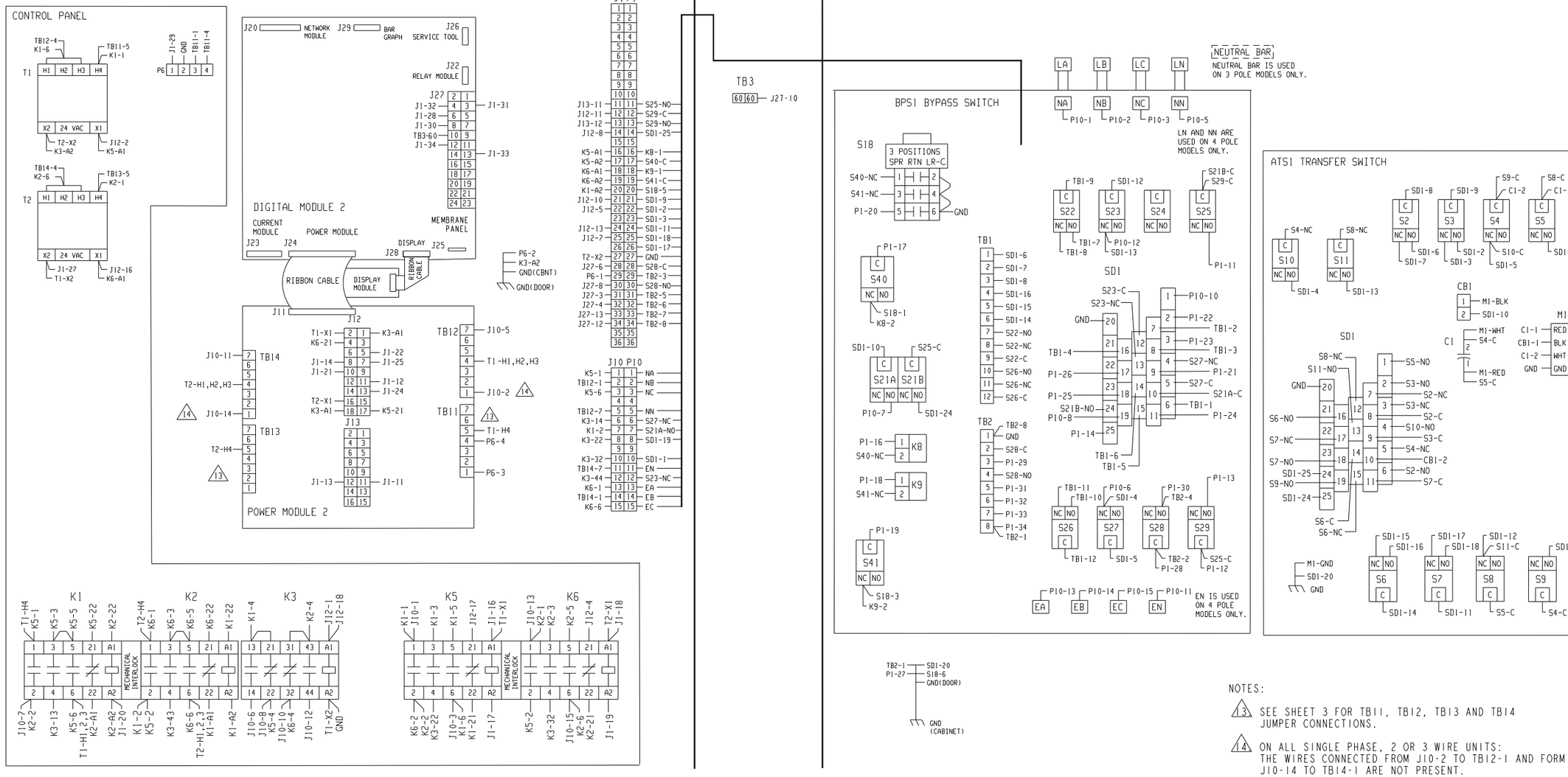
STANDARD WIRING

REAR VIEW OF DOOR

LEFT SIDEWALL

REAR WALL OF CABINET



NOTES:

13 SEE SHEET 3 FOR TB11, TB12, TB13 AND TB14 JUMPER CONNECTIONS.

14 ON ALL SINGLE PHASE, 2 OR 3 WIRE UNITS: THE WIRES CONNECTED FROM J10-2 TO TB12-1 AND FORM J10-14 TO TB14-1 ARE NOT PRESENT.

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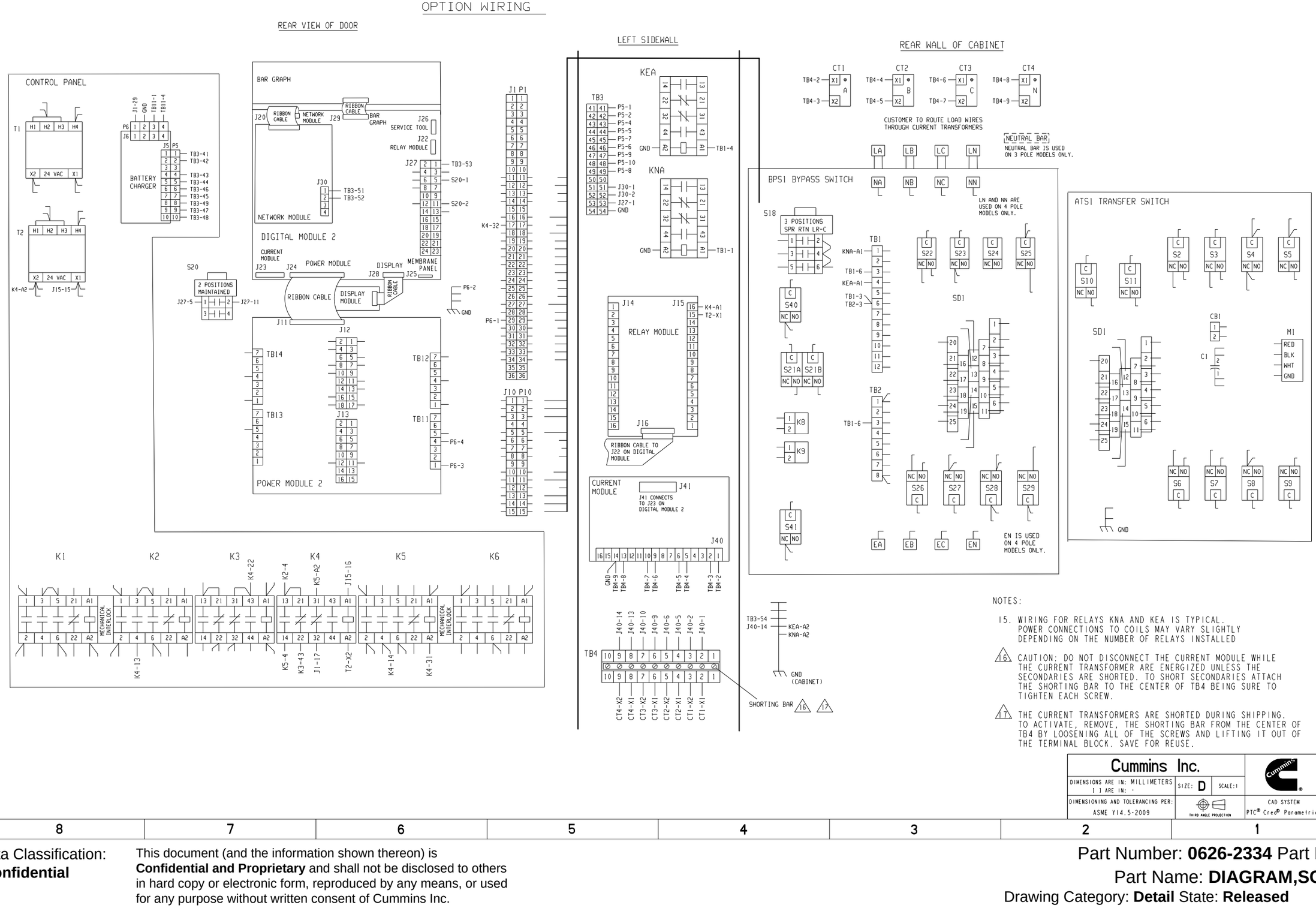
OPTION WIRING



NOTES:

15. WIRING FOR RELAYS KNA AND KEA IS TYPICAL. POWER CONNECTIONS TO COILS MAY VARY SLIGHTLY DEPENDING ON THE NUMBER OF RELAYS INSTALLED

16 CAUTION: DO NOT DISCONNECT THE CURRENT MODULE WHILE THE CURRENT TRANSFORMER ARE ENERGIZED UNLESS THE SECONDARIES ARE SHORTED. TO SHORT SECONDARIES ATTACH THE SHORTING BAR TO THE CENTER OF TB4 BEING SURE TO TIGHTEN EACH SCREW.

17 THE CURRENT TRANSFORMERS ARE SHORTED DURING SHIPPING. TO ACTIVATE, REMOVE, THE SHORTING BAR FROM THE CENTER OF TB4 BY LOOSENING ALL OF THE SCREWS AND LIFTING IT OUT OF THE TERMINAL BLOCK. SAVE FOR REUSE.

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Change Notice	CN00007909	Alternates	
Manufacturer Part (MEP)	No	Usage	Production Only
Release Phase Code	Production (P)	Drawing Specification	DS0626-2334
External Regulations		No External Regulation	

3D image provided when available for visual reference only.

Associated Specifications

Number	Name	Type	Category	Sub-Category
ESA030B356	SPECIFICATION,MATERIAL	Engineering Specification	Material Specification	Prohibited and Restricted| Prohibited and Restricted

Drawing Revision Information

Description of Change(s)
1) PART NAME "DIAGRAM,SCHEMATIC" WAS "SCHEMATIC & WD" 2) ATTRIBUTE CUMMINS DATA CLASSIFICATION "CUMMINS CONFIDENTIAL" WAS "INTERNAL USE ONLY" 3) UPDATE DRAWING FORMAT PER WINDCHILL REQUIREMENT. 4) SH 1: ZONE D3, TEXT "FAILED TO SYNCH" WAS "NOT USED. RESERVED FOR FUTURE USE" 5) SH 1: ZONE C3, TEXT "FAILED TO DISCONNECT" WAS "NOT USED. RESERVED FOR FUTURE USE"

Drawing Authorization

Drafter	Ajinkya Iraj	Date	29AUG2019
Checker	Laxminaresh Kondagadapa	Date	11SEP2019
Approver	GOKUL R BAIRAGI	Date	08DEC2020

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